

YOUR REGION FOR BUSINESS

**Life Sciences and Biotech in
the Toronto Region**

August 31, 2020



TORONTO REGION: A GLOBAL HEALTH & LIFE SCIENCE INNOVATION HUB

The Toronto Region has asserted itself as a leading location for innovation centres and incubators backed by the world's largest life science multinationals. The Toronto Region's well-established healthcare ecosystem and business friendly environment provides a competitive edge to innovative biotech companies. We have the talent, research expertise, and infrastructure to bring your expansion plans to life.

You business will thrive in the Toronto Region

- + The pacemaker, insulin, stem cells, and the neuroleptic receptor all have one thing in common: they were first discovered in the Toronto Region. With a critical and growing mass of top research talent, the Toronto Region is home to one of North America's leading life science clusters. More than 11,000 researchers and technicians operate out of the region's **37 research institutes, 9 teaching hospitals, and the University of Toronto's Faculty of Medicine**, with over \$1 billion in research funding. In 2016 alone, Ontario's research hospitals made 329 intellectual property disclosures and 109 health research commercializations.
- + Fifty-three of the world's top 100 life sciences companies and 16 of the top 25 global medical device companies operate in the Toronto Region. More than half of Canada's pharmaceutical companies are based here.
- + Our **well-established and collaborative ecosystem** allows innovative companies to move from research to commercialization all in one place. The Toronto Region is home to several specialized centres to support R&D efforts, including MaRS Discovery District and the Vector Institute for Artificial Intelligence. From deep learning to quantum computing to regenerative medicine, we are home to some of the world's most pre-eminent researchers in biotech and healthtech.
- + Our talent pipeline is second to none. Ontario's world-renowned universities and colleges produce over **40,000 STEM graduates per year** and the Toronto Region has a solid base of GMP skills thanks to a thriving pharma manufacturing industry and progressive immigration policies. Approximately 100,000 people settle in the Toronto Region each year and 10 per cent of them are STEM professionals.
- + We boast a **responsive regulatory environment**, enabling companies to streamline their research and development. Our single payer healthcare system and associated disease registries enable the coordination of multicentre clinical trials – crucial for the study of rare diseases with small patient populations.
- + **Canada is the only country that has a free trade agreement with every other G7 nation**, making the Toronto Region an ideal vantage point to conduct business across North America, Europe, and growing Asian markets such as Japan and Singapore.
- + Businesses in the Toronto Region benefit from high quality talent at a **globally competitive cost**. Our relatively low corporate taxes are offset by some of the most generous R&D tax credits in the world.

An aerial photograph of the Toronto skyline at dusk. The CN Tower stands prominently in the center, with its spire reaching towards the sky. Below it, the Rogers Centre stadium is visible, surrounded by other high-rise buildings. The sky is a mix of orange and blue, suggesting sunset or sunrise. The overall scene is a dense urban landscape.

ABOUT TORONTO GLOBAL

Toronto Global is a trusted partner for international companies exploring expansion opportunities in the Toronto Region.

Supported by Federal, Provincial, and Municipal governments, we offer complimentary and customized services that range from detailed market research to providing local connections to facilitate the establishment of your operations.

By understanding your specific business needs and interests, our dedicated team can streamline access to the information and connections you need most to make a well informed expansion decision. For us, your success is our success.

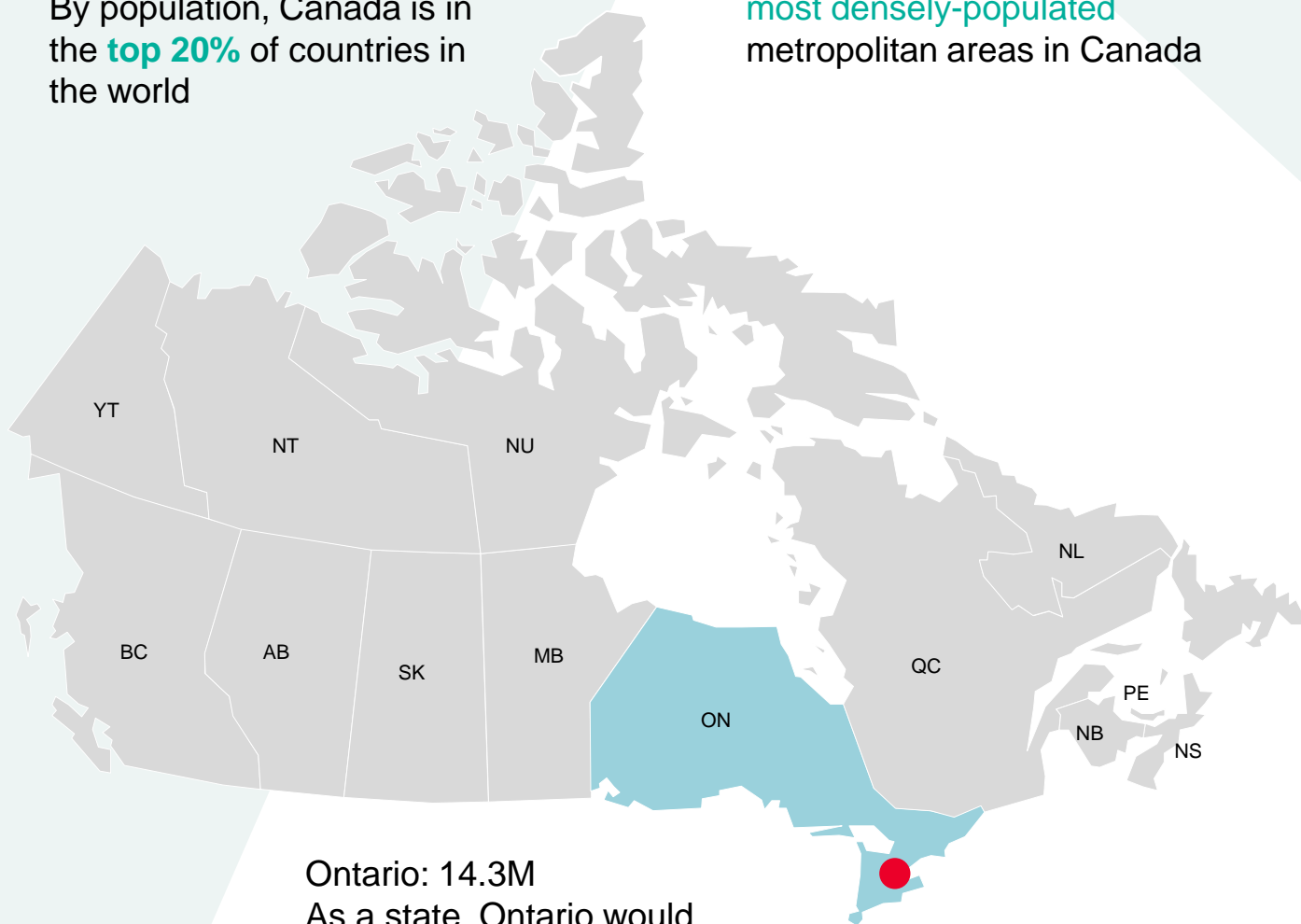
We look forward to working with you.



OVERVIEW

Canada: 37.1M
By population, Canada is in the **top 20%** of countries in the world

Toronto Region is one of the **most densely-populated** metropolitan areas in Canada



Ontario: 14.3M
As a state, Ontario would be the **fifth-largest** in USA

Toronto Region: 6.8M
Sixth-largest metro region in North America

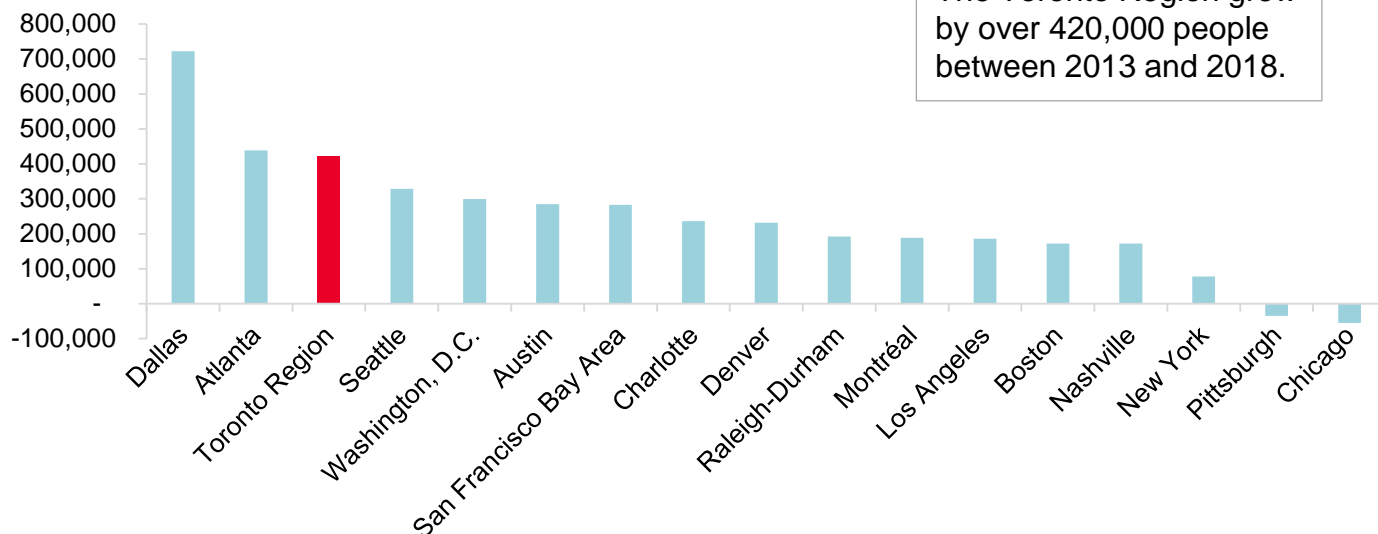
The Toronto Region is one of the **largest and fastest growing metropolitan regions** in North America. By 2041, the region is projected to grow to nearly 10 million people.

GROWING LABOUR FORCE

The Toronto Region is home to nearly **7 million people**, making it among the largest metro regions in North America. Toronto proper is the [fastest growing city](#) in the US and Canada, adding over 77,000 people in the year leading up to July 2018. The Toronto Region as a whole is projected to grow to 8.3 million by 2031 and 9.4 million by 2041, ensuring continued access to top talent for businesses.

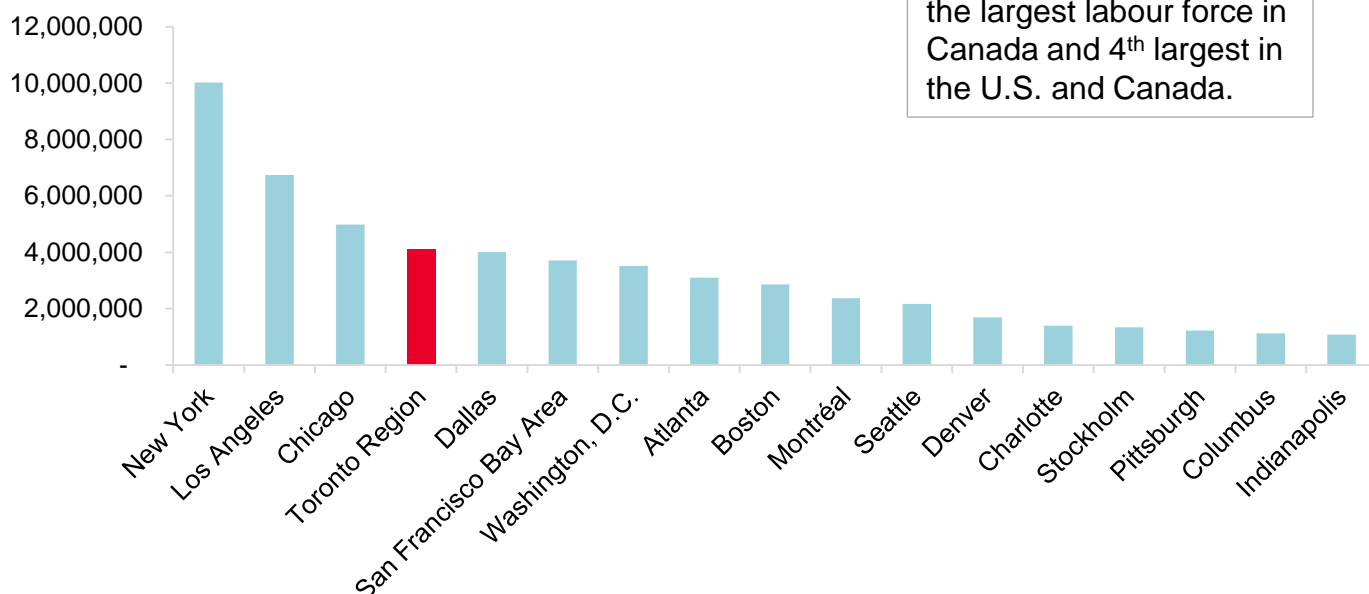
Population Change (2013-18)

Source: Statistics Canada, U.S. Census Bureau, Eurostat (2019)



Total Labour Force

Source: Statistics Canada, U.S. Bureau of Labor Statistics, Eurostat (2019)



Note: Data above represent the respective metro regions.

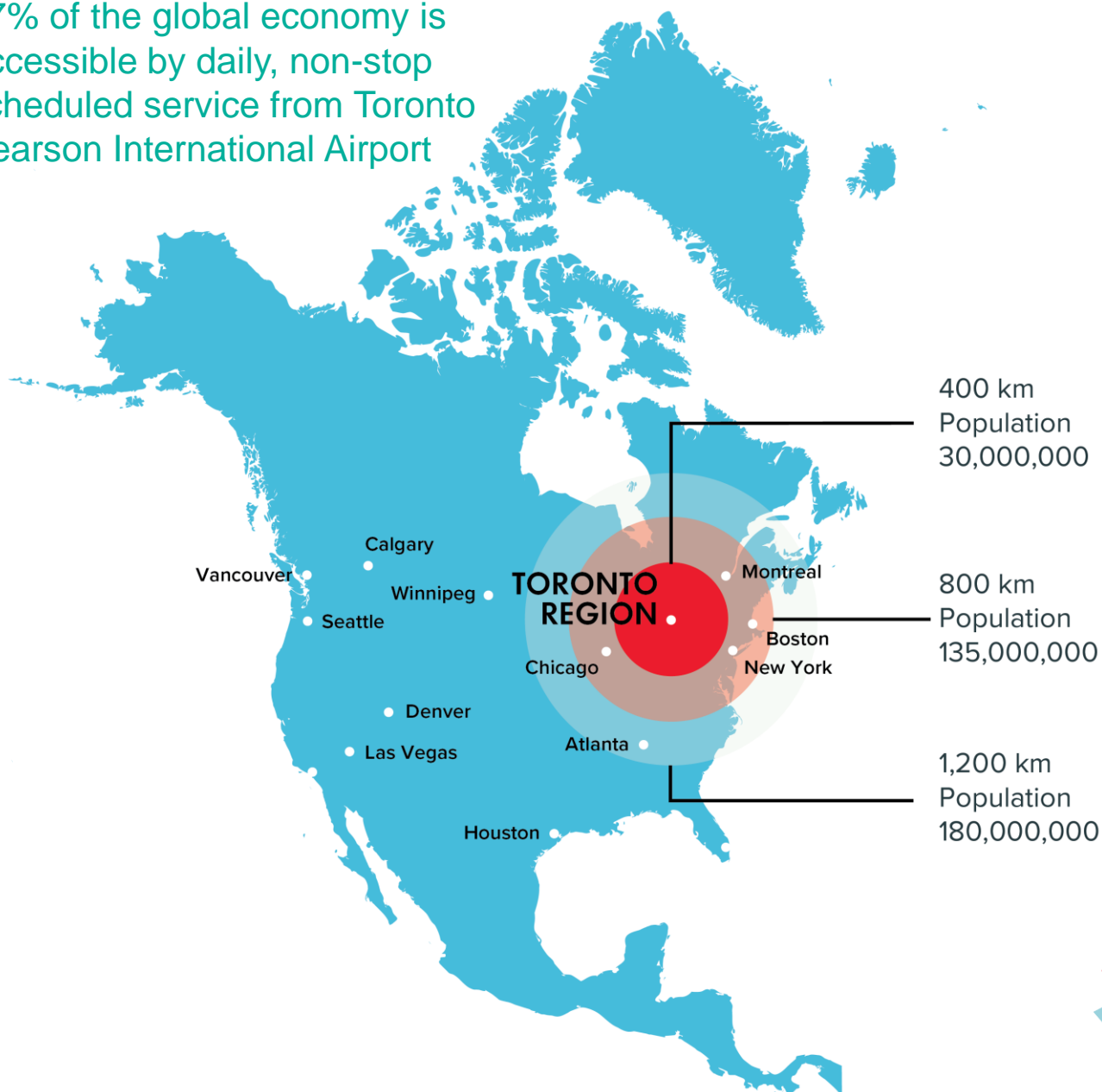


MARKET ACCESS

The Toronto Region's prime location provides businesses with excellent North American and international market access:

- + Access to a market of 130 million people within a 500-mile radius;
- + New York, Chicago, Boston, and Washington, D.C. via daily flights – all less than 90 minutes away – from Pearson International Airport and Billy Bishop City Centre Airport;
- + A North American market of 480 million consumers, with a combined GDP of USD \$21 trillion;
- + 14 trade agreements with 51 countries, providing access to 1.5 billion consumers and \$9.3 trillion in combined GDP;
- + Canada's most recent trade agreements – CETA with Europe and the CPTPP with 11 countries across the Pacific – have added over \$200B in market access for businesses beyond the USMCA (NAFTA) with the U.S. and Mexico;
- + The federal government has begun talks to draft free trade agreements with China and India, and will soon be signing into Mercosur and the Pacific Alliance with seven countries across South America.

67% of the global economy is accessible by daily, non-stop scheduled service from Toronto Pearson International Airport



LIFE SCIENCES IN THE TORONTO REGION

The Toronto Region provides a fertile ground for exploring emerging technologies and opportunities across the life sciences spectrum

"PILL HILL" TO THE WEST

- 30 multinational pharma and medical companies
- 30+ small and medium biotechnology and medical device companies
- Laboratories, manufacturing and warehousing operations
- University of Toronto — Mississauga, 1 college, 6 hospitals

HIGH-TECH CAPITAL TO THE NORTH

- Multinational generic, digital, and medical device companies
- Leo Pharma's new innovation lab focused on health and medtech
- York University, 3 colleges
- Canadian headquarters for ICT leaders such as IBM and Qualcomm
- Neutraceutical and manufacturing operations



BIOTECH RESEARCH HUB

- Major life science and biotech firms including Boehringer Ingelheim, UCB, and WellSpring
- Leading life sciences and biotech research institutions, including McMaster University and Sheridan College

"DISCOVERY DISTRICT" DOWNTOWN

- 9 research hospitals, 10 community hospitals
- 3 universities (including the University of Toronto), 3 colleges, 37 research institutes
- 160 biotechnology and medical device companies

ADVANCED MANUFACTURING TO THE EAST

- Multinational generics and digital companies
- Laboratories, manufacturing and warehousing operations
- Ontario Tech University, Durham College, 3 hospitals

TORONTO REGION

Join a Growing and Interconnected
AI Ecosystem

HIRE THE WORLD'S TOP AI TALENT

- + University of Toronto
- + York University
- + Ontario Tech University
- + Durham College
- + Ryerson University
- + Sheridan College

BE PART OF THE COMMERCIALIZATION ACTION



INNOVATE AMONG WORLD CLASS AI COMPANIES



JOIN ONE OF THE LARGEST AI STARTUP HUBS IN THE WORLD

60+
Business
Incubators

~50%
YOY Increase in
Total VC Funding

2,100
Startups

290K
Tech Sector
Jobs

COLLABORATE WITH THE WORLD'S LEADING RESEARCHERS

- + Vector Institute
- + Canadian Institute for Advanced Research (CIFAR)
- + Borealis AI

Toronto was the fastest growing
tech jobs market in North America
in 2017, creating more jobs than
the San Francisco Bay area, Seattle
and Washington D.C. combined.
(CBRE 2018)

HIRE THE WORLD'S TOP AI TALENT



Financial
Services/Fintech



ICT



Automotive



Robotics



Life
Sciences



Digital
Media



Food &
Beverage

GLOBAL LEADER IN SCIENTIFIC RESEARCH

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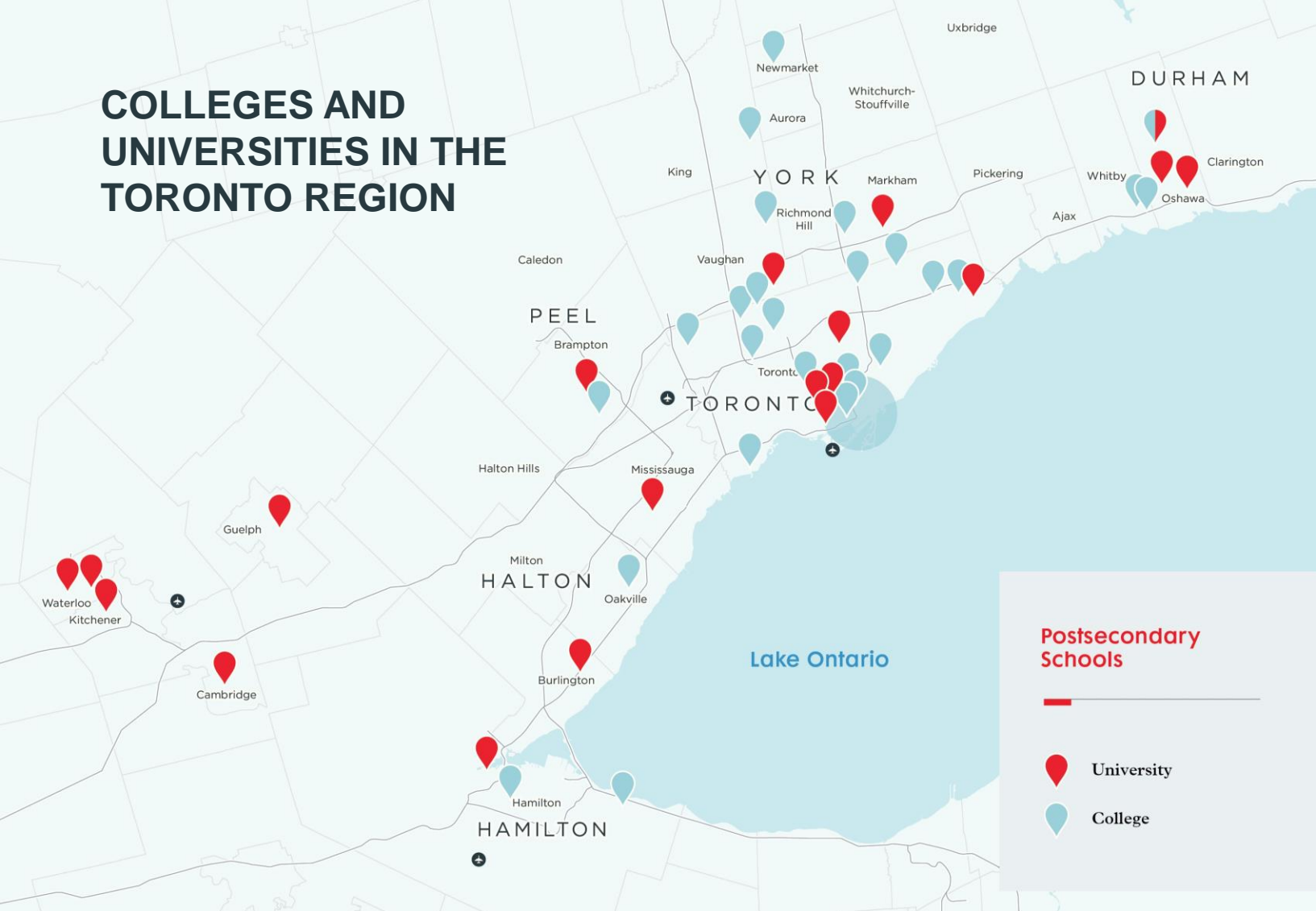
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- + In 2016 alone, Ontario's research hospitals made 329 intellectual property disclosures and 109 health research commercializations.

MaRS Discovery District

The region's Discovery District, a 2.5km² downtown research park and health innovation hub, is comprised of 7 million square feet of facilities representing Canada's largest concentration of hospitals, research institutes, business incubators, and venture capital organizations. Within a 15-minute walk, 10 different clinical trial sites can be reached. The Discovery District invests over \$1B annually into public and private medical research and supports over 1,200 companies.

- + **MaRS Health** supports nearly 300 high-potential health startups that span the full industry spectrum, from health monitoring and disease treatment to information storage & sharing.
- + **Toronto Innovation Acceleration Partners** (formerly MaRS Innovation) has launched [60 companies](#), including Encycle Therapeutics, with established collaborations with multinational pharma companies, including Pfizer and Merck.
- + **JLABS** is a world-renowned incubator located within the Discovery District that hosts up to 50 companies across the life sciences spectrum, including therapeutics, medical devices, and consumer health solutions. JLABS is the first Johnson & Johnson Innovation Lab to open outside of the US, showcasing the Toronto Region's extensive network of life sciences facilities.

COLLEGES AND UNIVERSITIES IN THE TORONTO REGION



Superior Education System

- + Boasting 18 colleges and universities in its jurisdiction – with three new campuses to open in Brampton, Milton, and Markham – the Toronto Region harbours an exceptional range of highly ranked postsecondary institutions.
- + More than 400,000 students are enrolled across the Toronto Region's 18 institutions, accounting for 75 per cent of Ontario's overall postsecondary enrolment.
- + Starting in the 2019-20 school year, the Ontario Government will be lowering tuition rates across the province by 10 per cent for every student enrolled in a publicly funded college or university. This will provide students and families with roughly \$450 million in tuition relief.
- + Ontario's postsecondary tuition rates are already some of the lowest in the G7. Average tuition fees in Ontario equate to approximately \$6,700 USD per year, compared with \$9,970 for US public colleges, \$34,740 for US private colleges, and \$14,130 for UK universities ([QS Top Universities](#)).
- + Ontario's unique college model offers a combination of academic and industry-centred education that provides businesses with a ready-made pool of graduates.

OPERATING COSTS: LIFE SCIENCE R&D CENTRE

The annual operating benchmarking cost results for a 50-person Life Science R&D Centre are based on the primary inputs of Labour costs and Property costs as per the profile to the right. This industry profile includes companies that are typically involved in research, discovery, design, development or testing of biotechnology or pharmaceutical related products and/or medical devices.

The Toronto Region has lower overall operating costs than major U.S. Life Science hubs. The overall operating costs for a Life Science R&D operation in the Toronto Region are \$4.4 million USD – 39 per cent more cost effective than Boston-Cambridge.

PROFILE LIFE SCIENCE R&D CENTRE

LABOUR

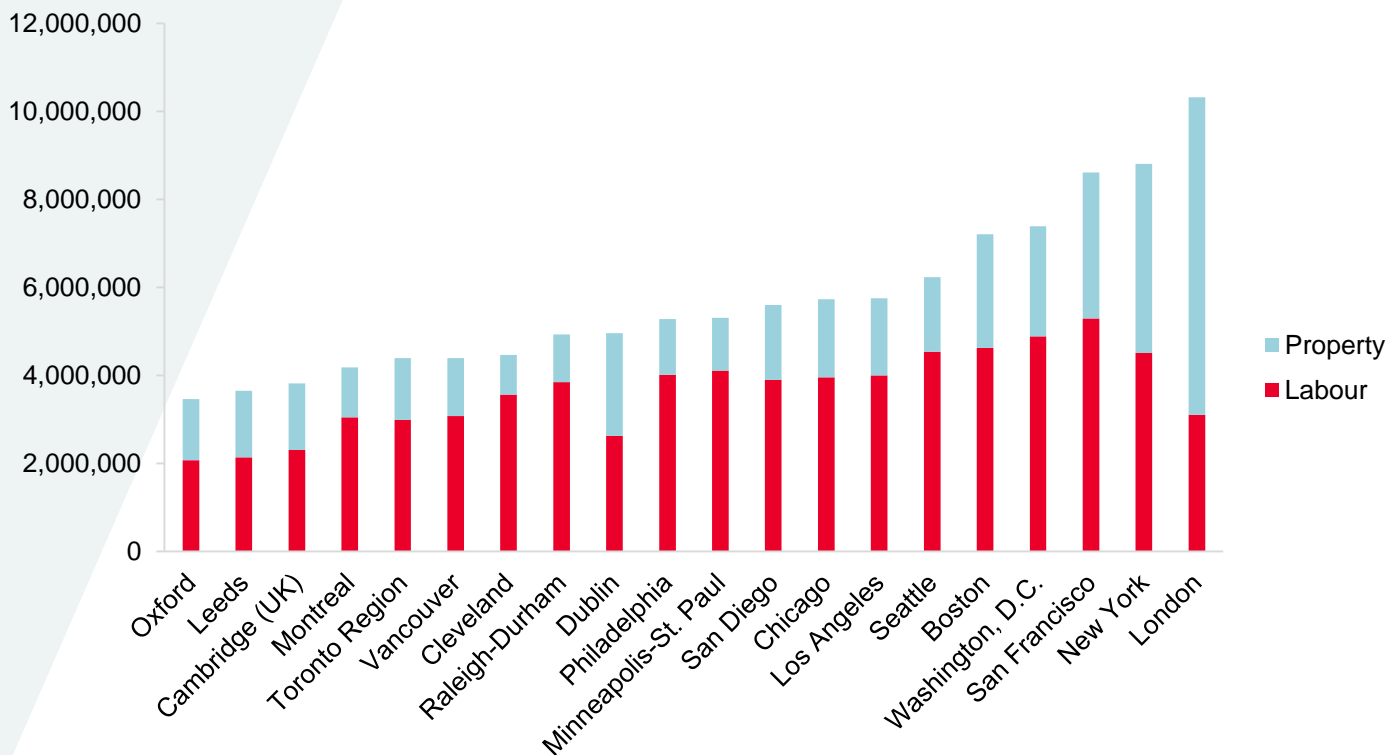
Headcount Total:	50
Laboratory Specialist	17
Laboratory Technician	15
Scientist	10
R&D Team Leader	4
Facilities/Office Services Specialist	3
Head of Research and Development	1

PROPERTY

Office Space (sq ft)	32,292
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Operating Cost Comparison (\$USD)

Source: fDi Benchmarks (2020)





**TORONTO
GLOBAL**

Toronto Global
info@torontoglobal.ca
www.torontoglobal.ca
[@Toronto_Global](https://twitter.com/Toronto_Global)